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The PAN AMERICAN UNION

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PARAGUAY

GENERAL DESCRIPTIVE DATA



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PARAGUAY IN BRIEF.

Area, 196,000 square miles (507,640 square kilometers).

Population (estimated), 800,000.

Capital, Asunción (population, 90,000).

FOREIGN COMMERCE 1915.

Exports.....	\$8,624,269
Imports.....	2,333,711
Total.....	\$10,957,980

The climate, subtropical, the lower two-thirds being within the Temperate Zone and only the upper third within the Tropics. Made healthful by several mountain chains and an extensive hydrographic system.

Principal Exports: Oranges, yerba maté, timber, hides, tobacco, dried beef, quebracho wood, lace, etc.

Principal Imports: Textiles, foodstuffs, hardware, fancy goods, wines and spirits, pharmaceutical products, ready-made clothing, hats, etc.

Chief physical characteristics: It is one of the two inland countries of South America. It has several mountain chains and numerous rivers, of which the Paraguay and Paraná are the most important. The Gran Chaco forms an extensive plain suitable for pasturage and agriculture.

Means of approach: By regular lines of steamers from Buenos Aires, and also from Montevideo, up the La Plata, Paraná, and Paraguay rivers, to Asunción, the capital. Also an all-rail route from Buenos Aires, through trains making the trip in 50 hours. Railways now building from Bay of San Francisco to the Falls of Iguazu will afford another route probably within a few years.

If specific information in regard to Paraguay, not contained in this pamphlet, is desired, the Pan American Union will endeavor to provide it upon application to the Director General.



PARAGUAY



The Republic of Paraguay, one of the two inland countries of South America, has an area of 196,000 square miles (507,640 square kilometers), and a population (1910, estimated) of 800,000, or 4.08 per square mile (1.5 per square kilometer).

With a subtropical climate considerably modified and made healthful by several mountain chains and an extensive hydrographic system, most of the products of the Tropical and Temperate Zones are successfully cultivated. The extensive plain of the Gran Chaco affords excellent pasturage for cattle, and the slopes of the mountains of the country are covered with luxuriant forests, where many useful woods and medicinal plants are to be found.

Beef products, the valuable quebracho wood, and yerba maté or Paraguay tea, are the principal articles of export. Lapacho, curupaz, and cedar are valuable woods found in considerable quantities, and oranges tobacco, coffee, rice, cotton, mandioca, and sugar are grown and exported. The beautiful nanduti lace is one of the products of native industry.

HISTORICAL SKETCH.

The country now comprising the Republic of Paraguay was first discovered by Sebastian Cabot, who, in the year 1526-27, explored the upper Paraná and Paraguay rivers and the adjacent country. He was followed by Juan de Ayolas and Domingo Irala, who, on August 15, 1536, founded a settlement on the present site of Asunción, the capital of the Republic.

Subsequently Alvaro Nuñez Cabeza de Vaca, famous for his explorations in North America, was appointed Governor of the Province of Paraguay, which at that time comprised all the country drained by the La Plata, and disembarking in the year 1542 at Santa Catharina in Brazil, proceeded overland to his destination. He reached Asunción after a journey of one hundred and thirty days, having traversed more than 1,000 miles of hitherto unexplored and practically unknown territory.

Don Hernando Arias de Saavedra became Governor in 1591, and at his invitation the Jesuit missionaries came to Paraguay, arriving in

1608. They treated the Indians kindly, and by founding schools and missions soon gathered thousands of the aborigines around them, forming practically an independent State which thrived for many years. Their power was finally broken in the year 1769, when the King issued a decree expelling all Jesuits from the Spanish colonies in America.

Paraguay was then nominally under the jurisdiction of the Viceroy of Peru, but in 1776 the viceroyalty of La Plata Province was created, including Paraguay.

When, in the year 1810, the Argentine Republic declared its independence from Spain it was the intention to include in the united Provinces of the Rio de la Plata all the country which had formally been under the jurisdiction of the viceroyalty of that name. The inhabitants of Paraguay, however, desired to establish an independent Republic and declared their independence on August 14, 1811. The Spanish Governor Velasco was in sympathy with the movement and was elected a member of the provisional *Junta* or Governing Board. A constitutional congress, which met on October 1, 1813, adopted a national flag and vested the administrative power in two consuls, Don José Gaspar Rodriguez Francia and Don Fulgencio Yerges. In 1844 the form of government was changed, the executive power being vested in a President, elected for a term of ten years. Don Carlos Antonio Lopez was the first President and upon the completion of his term was reelected. He died on September 10, 1862, before completing his second term, and was succeeded by his son, Don Francisco Solano Lopez, who died on March 1, 1870.

A congress of representatives of the people was convened which, on November 25, 1870, proclaimed a new constitution which completely reorganized the Government.

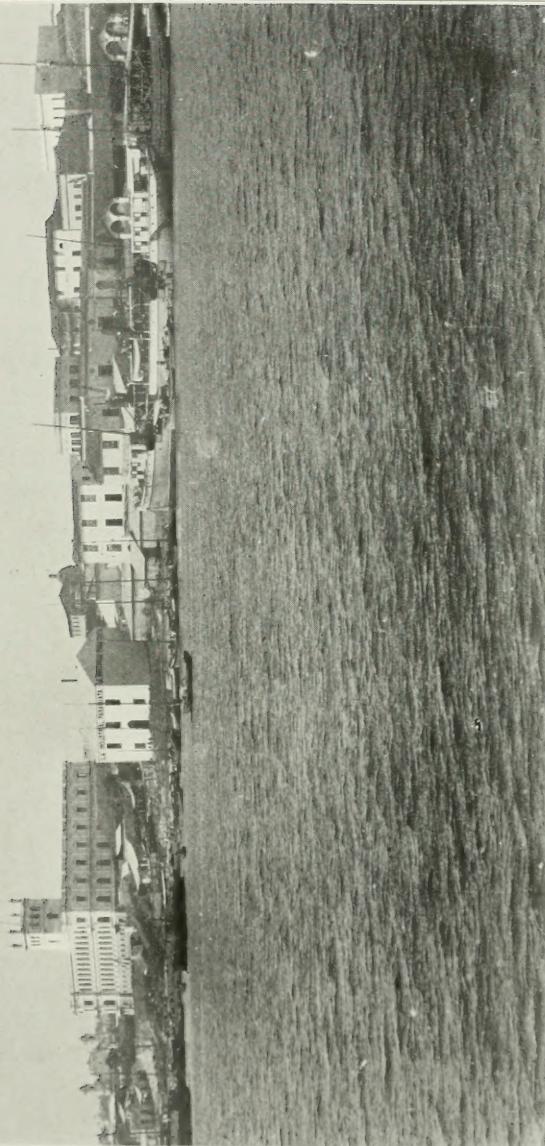
CONSTITUTION AND GOVERNMENT.

The constitution of Paraguay provides for a republican form of government, with the usual division of legislative, executive, and judicial authority.

The National Congress is composed of the Senate and Chamber of Deputies, both elected by direct popular vote, all male citizens over 18 years of age being entitled to suffrage. Senators are elected for six years on the basis of 1 for every 12,000 inhabitants, or fraction over 8,000; deputies are elected for four years at the rate of 1 for every 6,000 inhabitants, or fraction exceeding 3,000. The Senate is renewed by thirds and the Chamber of Deputies by halves every two years. Congress meets annually on April 1 and continues in session until

RIVER FRONT, ASUNCION, PARAGUAY.

Asuncion, the capital and largest city of Paraguay, is situated on the east bank of the Paraguay River, about 650 miles (say 1,000 kilometers) from Buenos Aires, with which seaport splendid steamboat communication is maintained. The river at this point is something over 600 yards (say 600 meters) in width. Asuncion is one of the most important interior ports of South America, with a harbor capable of accommodating an extensive commerce.



August 31, but extraordinary sessions may be called at any time by the President or on motion of four deputies and two senators.

The President and Vice President are elected by electors chosen for that purpose, for a term of four years.

Dr. Manuel Franco is President of the Republic. He was inaugurated August 15, 1916. The cabinet, consisting of five members, is composed of the following:

Minister of the Interior.

Minister of Foreign Relations.

Minister of the Treasury.

Minister of Justice and Worship.

Minister of War and Marine.

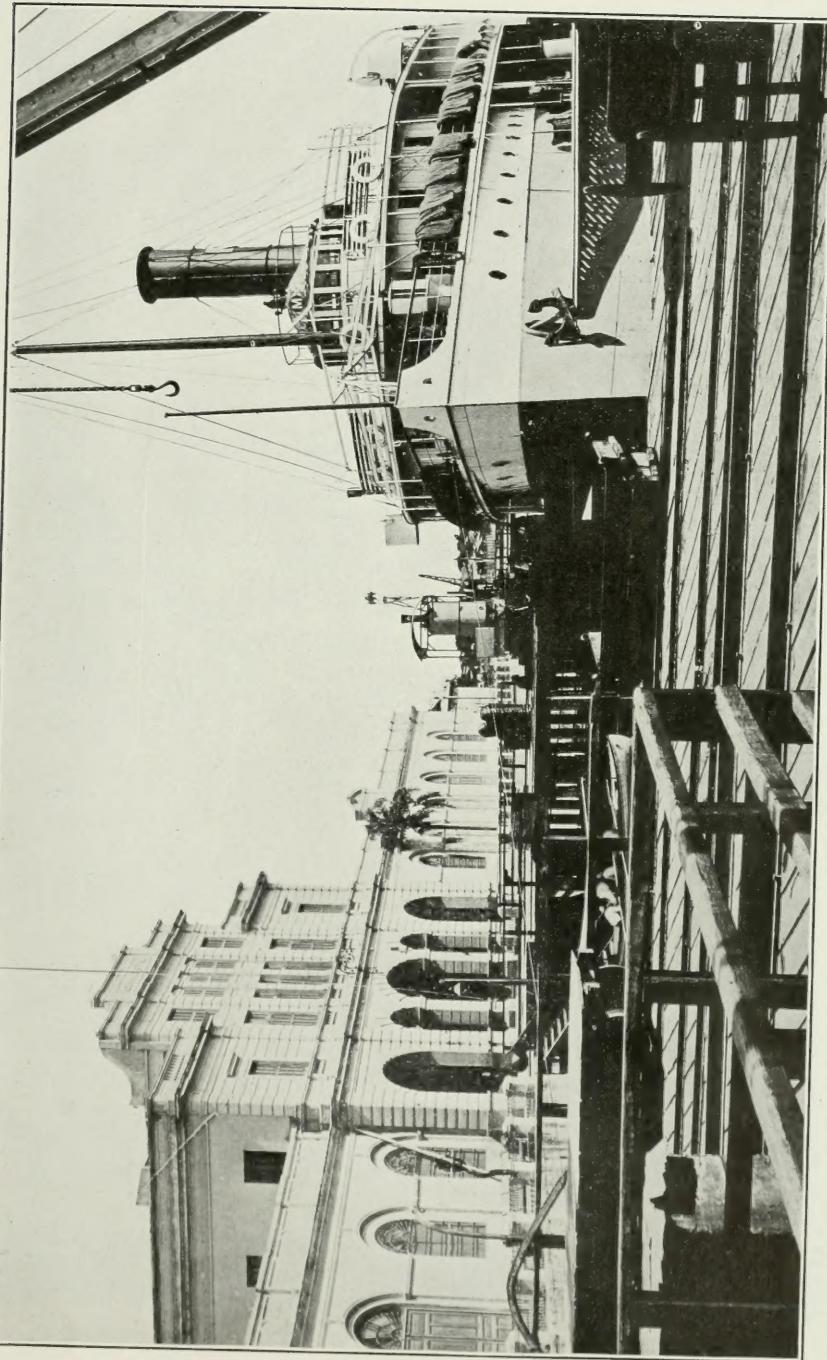
Minister of Promotion.

The Department of the Interior (Ministerio del Interior) administers the departments and municipalities, and has charge of the general elections, the police and fire departments, post-office and telegraph systems, railways and waterways, roads and bridges, and all matters pertaining to public health and sanitation as well as public buildings and works, the national bureau of statistics, the register of deeds, and titles, and the national department of engineers.

The Department of Foreign Relations (Ministerio de Relaciones Exteriores), aside from the supervision and control of the diplomatic and consular corps, is intrusted with the settlement of international boundary disputes and the adjudication of similar matters with foreign powers. It also has charge of immigration and colonization through a bureau which attends to securing immigrants for the various agricultural colonies scattered throughout the Republic.

The Department of the Treasury (Ministerio de Hacienda) administers the finances, collects all revenues and directs the disbursements thereof, prepares the annual budget and has charge of the custom-houses, the national accounting office, the national bank, the agricultural bank, the conversion office, the patent office, and the government printing office.

The Department of Justice, Worship, and Public Instruction (Ministerio de Justicia, Culto e Instrucción Pública) has the administration of justice and all matters pertaining thereto, and supervision over the Roman Catholic churches and clergy. All public and private schools as well as special institutions, such as the National University, the School of Agriculture, the National Library, the National Museum, the School of Arts and Crafts, the Industrial School, and the civil register for the registration of births, deaths, marriages, and the preparation of vital statistics are under its charge.



THE LANDING PIER AT ASUNCION.
The Paraguay River is navigable for vessels drawing up to 12 feet as far as Asuncion, but steamers constructed for that purpose ascend much farther, even into Brazil.

The Department of War (Ministerio de Guerra) has charge of the recruiting and training of the standing army as well as of the national guard. The naval academy and other schools and institutions for the training of army officers and men are under its jurisdiction.

The Department of Promotion (Ministerio de Fomento), recently formed, is active in every manner which will advance the material interests of the Republic.

The national council of agriculture and industries, consisting of a number of private citizens, appointed by the President to promote agriculture and industries in the Republic, and the national society of agriculture, a private association formed for the same purpose, acts in harmony with this department.

The judiciary includes a superior court, two courts of appeals, and a number of minor tribunals. The superior court is composed of three justices, appointed by the President, with the consent of the Senate, for a term of four years.

The standing army is composed of 2,600 officers and men. There is also a national guard, all citizens of the Republic between their twentieth and thirty-fifth year being liable to military service. The navy consists of a small dispatch vessel and two transports.

There are about 400 post offices in the country. There are over 2,000 miles (3,255 kilometers) of telegraph lines, offices being established at all the principal towns from Asunción southward, and the service is to be extended in the north toward the Brazilian boundary line.

For administrative purposes the Republic is divided into 84 departments, each under a political chief appointed by the President for a term of four years. These departments are divided into municipalities, each governed by an intendente or mayor and municipal council elected by direct vote of the people. For electoral purposes a division of the country is made into 24 electoral districts.

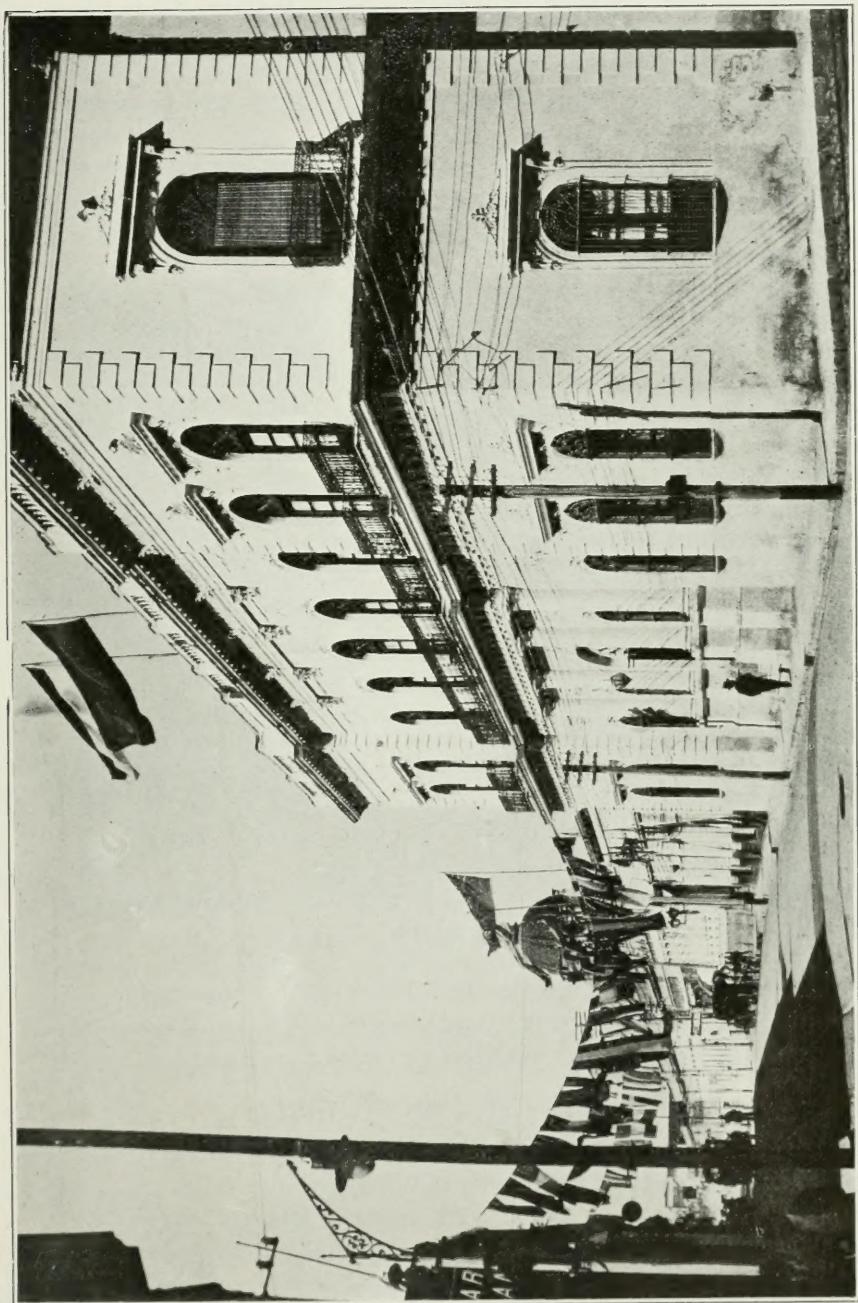
Paraguay maintains a Minister in Washington as diplomatic representative to the United States, and has Consuls General in Washington, New York and Philadelphia; Consuls in San Francisco, Chicago, Boston, and New York; Vice Consuls in Mobile, Wilmington (Del.), Indianapolis, Baltimore, Kansas City, St. Louis, Newark (N. J.), Buffalo, Rochester (N. Y.), and Cincinnati. The United States maintains a Minister in Asunción as diplomatic representative to Paraguay, and a Consul with a Vice and Deputy Consul in Asunción.

The *money* of Paraguay has as the unit the gold *peso*, the basis for which is the Argentine peso valued at \$0.965 U. S. gold. The currency at present is a paper peso. On January 1, 1914, one gold peso had a value of 15 paper pesos. In circulation there are, besides the paper, subsidiary coins of 20, 10 and 5 centavos. The gold unit is generally so

MAIN STREET IN ASUNCION, THE CAPITAL OF PARAGUAY, IN GALA ARRAY, FOR ITS CENTENNIAL CELEBRATION OF MAY

13-20, 1911

The house on the right was formerly the palace of Don Carlos Antonio Lopez, the first President of that name, who was elected for a term of 10 years in 1844, and reelected in 1854. He died, however, before the completion of his second term, and was succeeded by his son Don Francisco Solano Lopez. The building is now occupied by the Hotel Hispano-American.



stated, and is employed in most reports of financial transactions, the paper peso being the commercial currency. The Argentine gold and silver coins of the Argentine Republic have been recognized as legal currency in Paraguay. The metric system of weights and measures prevails in this country.

The *population*, approximating 800,000, includes, besides the descendants of European races, a large number of Guaraní and Chaco Indians, the original inhabitants of the land. Of late years the tide of immigration has set steadily toward Paraguay, with the result that a relatively large number of foreigners have now made their homes in the country, and are finding encouraging opportunities to take an active part in the agricultural and industrial development. The capital of the Republic is Asunción, founded in 1536, situated on the left bank of the Paraguay River, somewhat south of the center of the country. Its population is rapidly approaching 100,000, of a cosmopolitan and cultured character. The climate there being remarkably agreeable, it has attracted many visitors, not a few of whom become settlers later, and now that close rail communication is established with Buenos Aires, together with the river transportation, Asunción promises to be one of the preferred winter resorts and residence of South America. A complete modern electric car and light system has recently been installed in the city, which adds much comfort and convenience to life there. Strong effort is seeking to introduce further municipal improvements, so that the city will soon become recognized as one of the advanced capitals of Latin America. Among the public buildings worth visiting are the cathedral, the government palace, the municipal palace, and several fine business structures that indicate the rapid advances of the capital. The second city is *Villa Rica*, with 30,000 inhabitants, situated about 90 miles (145 kilometers) from Asunción toward the southeast, on the main line of the railway to Buenos Aires. It is an industrial city in the midst of a rich agricultural and forest region. *Villa Concepcion*, 135 miles (213 kilometers) north of Asunción, on the left bank of the Paraguay River, with 25,000 inhabitants, is a port of entry and has an important commerce within the Republic as well as international traffic on the river.

PRODUCTS AND INDUSTRIES.]

The resources of the Republic at present are confined mostly to the production of raw material, the industries being few in number.

The climate and soil of the Republic are suited for all tropical growths. Indigo and sugar cane yield easily to cultivation, and the forests contain many different grades of cabinet and dye woods, resins, and balsams, while a native fiber plant known as mapajo is used by the Indians in the manufacture of a coarse textile for garments.

Tobacco is one of the leading crops. Special attention is being given to its cultivation, and it is growing in importance as an article of export. The soil and climate of the country has been found to be suited to raising this article from the best seed secured in Cuba, with results which stand the test of competition in the European markets.

The possibilities of the Republic as a cotton producer are immense, the rich and fertile soil assuring a large yield per acre. As early as 1863 there were estimated to be 58,000,000 cotton plants under culti-



THE PALACE OF JUSTICE.

Among the newer buildings in Asuncion is that constructed for the law courts, or the Tribunal of Justice, as the Spanish phrase is. This palace is situated on Calle de las Palmas, not far from the river bank.

vation in the country. The native cotton has a long, silky fiber and enjoys excellent reputation in Germany, England, and Holland on account of its fine weaving qualities.

The production of the oil of petitgrain extracted from the leaves of a native orange tree is being conducted on an increasing scale, the principal distilling plants being located about 50 miles (80 kilometers) from Asunción, in the orange-growing district of Yaguaron. It is estimated that 300 to 350 pounds of orange leaves yield about 1 pound of essence, this product being used as a basis for various perfumes and in the manufacture of flavoring extracts. The preparation of the oil for trade purposes constitutes a lucrative industry in Paraguay.

An industry of considerable importance in the country is lace making. The variety and beauty of the patterns woven have attracted considerable attention, while the delicate quality of the work has given the Paraguayan product a place of eminence in the world's production.

The live-stock industry in the Republic is constantly increasing, many cattlemen from the Argentine Republic and Brazil having located in the country in recent years. The exports of meats and jerked beef are well known in foreign markets, principally Brazil, Cuba, and Spain and the hides exported to Europe command good prices. It is estimated that there are over 5,000,000 cattle of all kinds in the Republic.



THE BANCO MERCANTIL (COMMERCIAL BANK) IN ASUNCION.

The bank itself was founded in 1891, and its business has demanded the erection of this substantial structure, which is designed for its purpose, and has all modern fixtures and devices to that end.

There are two saladeros or beef-curing establishments in Paraguay, both located on the river north of Asunción. Each of these plants kills from June to October about 18,000 head of cattle, the product being the jerked beef which figures largely in Paraguayan exports.

The tanneries in the Republic give their attention chiefly to sole leather, but one at Asunción turns out a limited line of calf, kid, saddle, and harness leather.

Various minerals are found in the Republic, such as quartz, agate, opals, kaolin, iron, manganese, copper, and mercury, but the mining industry has been little developed.



THE CAPITOL AT ASUNCION, PARAGUAY.
The National Congress of the Republic of Paraguay is composed of two bodies, Senate and Chamber of Deputies. The modern Italian Renaissance style is the principal feature of the architecture of the buildings.

The principal crop is maté, of which about 17,600,000 pounds (7,983,²⁰ kilograms) are treated annually. About one-half of this amount is exported. The plant grows wild in immense tracts in the northern and eastern sections of the Republic, being found most abundantly in the districts of Panadero, Igatimi, San Pedro, Villa Concepcion, Caaguazu, Jesus, and Tacurupucu.

Yerba maté (or *Herva matte*, as the same article is spelled in Brazilian Portuguese) is altogether indigenous to a well-defined area of South America. The aboriginal Indians of the basin of the Rio de la Plata, the Guarani, knew and used the plant long before the invasion of their country by the Spaniards. When these Indians were subdued, they were found to be using a drink made of a plant that grew wild and abundant over the subtropical regions in which they lived.

Caá was the name given to this plant by the Guarani. Caá means simply weed, and the Europeans, translating literally, called the plant yerba, a word similar to the English "herb," with which it is etymologically allied. Caá guazù, the still more specific Guarani term, means "big or splendid weed." The maté is the dried gourd, hollowed out, with an aperture where the stem used to be, into which the crushed leaves are placed and into which the boiling water is poured; from the maté the decoction is sucked through a hollow tube, called a bombilla (little pump), at first and at times even now made of a reed or bone, but usually fashioned from metal with a perforated, spoon-shaped expansion at the extremity inserted into the maté. By habit the container implied also the thing contained, so that maté is also what is sucked from the maté in which it is prepared.

Yerba maté is, therefore, directly translated, only a drink made out of an herb. The word maté is sometimes applied to plants in Cuba and Mexico of the leguminous family, with no recognized connection. Botanically the plant from which the drink is made is a holly, *Ilex*, a genus of trees belonging to the order *ilicinæ*. The holm oak is embraced in this order. Others of the genus *Ilex* grow in many parts of the world, preferring a temperate or a subtropical climate.

The *Ilex paraguayensis* is the South American holly, growing spontaneously in the four Brazilian States of Parana, Santa Catherina, Rio Grande do Sul, and Matto Grosso; in the northeastern region of Argentina, and especially in all the eastern and central parts of Paraguay. It is an evergreen tree or shrub, very bushy and beautiful, from a distance resembling an orange tree. It has no prickles or spines. The leaves are a bright green, the yellowish flowers being insignificant, and the tiny berries are a purplish black. Some of the specimens are better than others, the one preferred as giving the best quality of tea leaves having a very small leaf of a dark-green shade. The fruit is attached by



THE MUNICIPAL BUILDING IN ASUNCION.

With the activity that has been shown in all the Republic, the capital city, Asuncion, has kept pace, and to house the administrative offices of the government of the municipality this building has been recently constructed.

a short stalk to the branches; it contains a soft pulp with hard seeds, which, if left exposed for a few days, become so hard and dry that they can be cut only with sharp instruments. The Indians originally did nothing but gather the leaves from the trees in the forest, depending upon the natural source for additions to their supply, but the Jesuits devised a means to replenish the trees by cultivating them from the seed.

Collecting the leaves is, as a rule, conducted in the same way that was characteristic of the industry centuries ago. It is a native method differing little in details, either in Brazil, in Argentina, or Paraguay.



LEAVES OF THE *ILEX PARAGUAYENSIS*.

Their color is a bright green, and, seen at a distance, the shape of the tree and the character of these leaves make a picture very similar to the more familiar orange tree.



COMMERCIAL PACKAGE OF YERBA MATÉ.

In any city or town where Paraguay tea is drunk, the powdered leaves of yerba can be bought in tins, boxes, or simpler containers. Some come from Brazil direct, but most of the supply, reaching Buenos Aires in great bundles, is repacked there for the retail trade. These packages weigh from 2 to 10 pounds.

When cutting begins it is continued until a mountain of branches is collected and piled up in the form of a haystack.

Then the smoking, or as it is called in more elegant language, the torrefaction, begins and lasts for about three days, the native skill, based to a great extent upon tradition, being trusted to decide the proper moment when the leaves have reached the exact degree of dryness for preparation into powder. Twenty-four hours is probably the minimum time for exposing the leaves to heat.

The immense forests in southern Brazil, Paraguay, and the Argentine Mesopotamia (chiefly the Territory of Misiones) furnish the world's supply of the yerba, but cultivation is beginning to add its proportion, and it is more than probable that, within a few years, especially since the increased popularity of this drink and the determined efforts made to give it a foreign vogue, there will be a steady growth in the cultivation of Paraguay tea.

A reasonable and quite impartial estimate places the number of drinkers of Paraguay tea at about 10,000,000 persons in South America.



THE BOMBILLA AND THE MATÉ

Yerba Maté is prepared in a small gourd, also called the maté. In it are placed the dried leaves and boiling water is poured over them. Sugar is added to suit the taste. The decoction (tea) is sucked up through a reed or metal tube called a "bombilla."

and it is stated, moreover, that the supply frequently falls short of the demand. The yearly consumption per capita of this yerba is given as being in Chile, 51 kilograms ($112\frac{1}{2}$ pounds); in Bolivia, 2.50 kilograms ($4\frac{1}{2}$ pounds); in Argentina, 9 kilograms (20 pounds); in Uruguay, 10.02 kilograms (22 pounds); in Paraguay, 15.73 kilograms (34 pounds); and even in the Brazilian State of Parana, from which come great quantities of maté, although it is near the coffee-growing center of the world, the annual per capita consumption is 20 kilograms (44 pounds), a demonstration of the profound influence the habit makes upon the European

INDEPENDENCE PARK, ASUNCION.



immigrant even from the northern portion of that continent, for Parana has a relatively large proportion of Germans and Poles among its colonists.

With tea and coffee the Paraguayan yerba maté has much in common. It contains both tannin and caffein. Of tannin the proportion is decidedly less than that estimable in both green and black teas and falls short of the amount in coffee; of the other alcaloid, known as caffein, thein, or in this case sometimes given the name matein, the proportion is less than in the teas, but approximates the amount contained in the coffees. This amount of caffein is given in various analyses as from 1 to 2.50 per cent, according to the leaves furnished.

The caffein, then, is the active principle that gives to Paraguay tea its sustaining quality, and the small quantity present in it accounts for its unquestioned virtues. "The slight amount of caffein in Paraguay tea, and especially the almost infinitesimal amount of essential oils compared with tea and coffee, explain fully the dietic and physiologic advantages of the drink." It does not irritate but it soothes the nervous system, and this accounts for its historic and contemporary use among the Indians, plainsmen, cowboys, natives, and European colonists.

The tea can be drunk either cold or hot. Hot, it can grace the tea table and be served in all the ways so well known in the consumption of Japan tea. Cold, it offers a fine drink for excursions, for picnics, or the thousand and one requirements of daily life. It might even add one more to the attractive offerings of the American soda fountain, for the traveler who knows his South America can well imagine many a drink more harmful than Paraguay tea and no more attractive. It is reported that in England a company has been formed to extend the use of maté; returning Italian and German settlers in the River Plate region insist on importing for their own use their beloved tea, and soldiers in European armies, even if they have previously had no practical experience with the drink, take kindly to it as soon as they note its cheapness and healthfulness.

The increase in amount gathered is a fair test of the hold the tea has in the affection of its consumers. In 1726 the harvest report was no more than 625,000 kilograms (1,378,000 pounds) for all of South America; in 1905 it had reached the total of 100,000,000 kilograms (220,462,000 pounds); in 1909 the estimated production was 105,000,000 kilograms (231,485,000 pounds). Argentina, Bolivia, and Chile import the powdered leaves, Paraguay and Brazil export, although both the latter countries are also enormous consumers, and both the former might cultivate the tree. In fact, Argentina has already taken this step, and the plantations are promising remarkable success. France is the European country importing most yerba, followed by Germany,

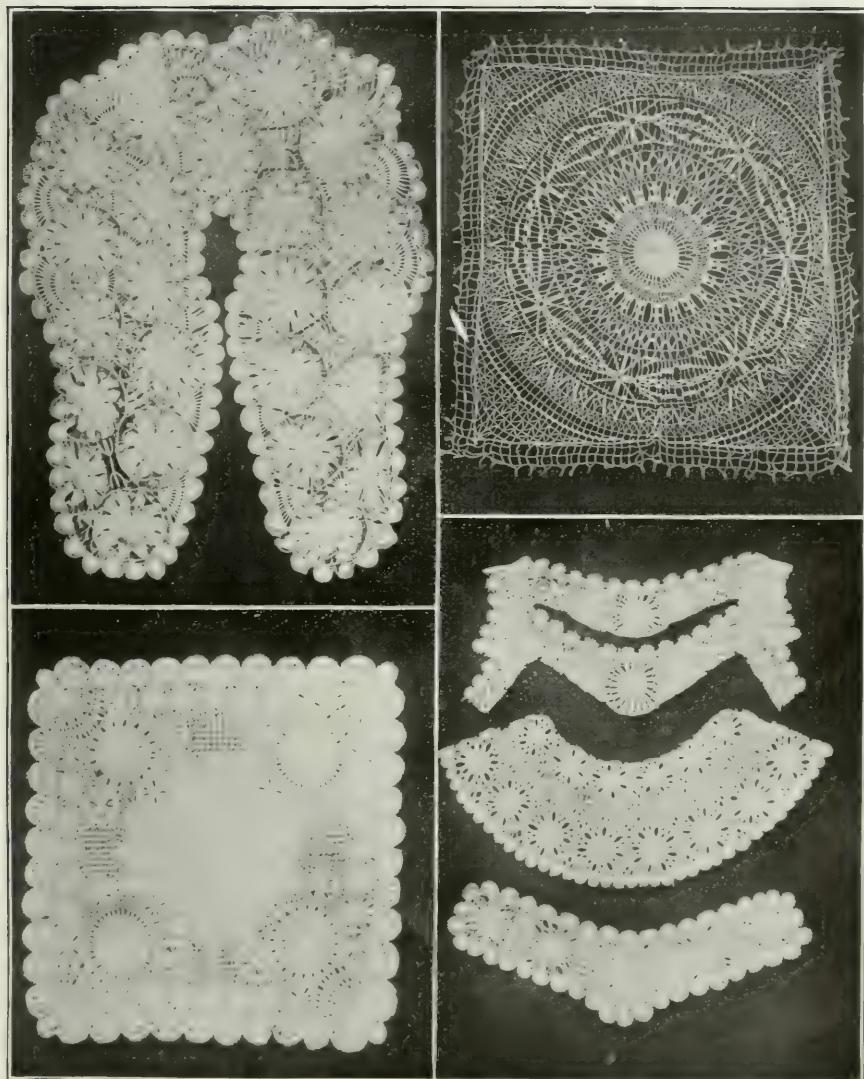
Italy, Spain, and Portugal, and it is commercially on sale in England. It must not be said that the United States is the last to appreciate the excellence of the Paraguay tea.

Quebracho is a contraction of the colloquial Spanish and Portuguese term *quiebra-hacha*, originally applied to many trees in Latin America. It means "ax breaker," and the character of the timber is implied in this meaning.

Species of the quebracho tree are to be found growing in the Chaco country of Paraguay, Brazil, and northern Argentine Republic, the red colored being the one containing tannin used in the manufacture of the extract so valuable in the tanning of hides. The wood itself is one of the hardest known species and furnishes material for railway ties for a large part of South America. It is used also for furniture. Every portion of the tree is utilized for the extraction of tannin. In Paraguay and the Argentine Republic the wood is a large item of national wealth, the land bearing the trees selling from \$3,000 upward per square league. During one year Paraguay manufactures many thousands of tons of extract, and the United States imported in 1910 over \$4,000,000 worth of quebracho for tanning and other purposes. Much of this wood comes from the Chaco region of South America, which belongs to both Argentina and Paraguay, but the larger area is part of the latter Republic, and it grows wild in all parts. Gathering quebracho is now a recognized industry, and so extensive has it become that even railways are pushed into the wilderness to facilitate the ever increasing supply to market, while ocean steamers travel up the rivers emptying into the Parana, so as to be on hand to receive the wood or the extract as it is brought from the forest, and whole settlements gather and leave permanent trace over this immense tract of Paraguay where quebracho grows. Quebracho may be cultivated, although the tree is of slow growth, but the necessity for that step may arise if the demand continues. In addition to the great value as furnishing tanning material, the tree is of indispensable service in railway and fence construction in South America, for the wood is extremely hard, and seems to be the only material immediately available for sleepers; its reputation has spread so widely that many sleepers are to-day exported to Europe.

The industry of extracting tannin from quebracho had its origin in France, where a consignment of logs was sent from Paraguay in 1874. The first factory in South America for the manufacture of the extract was erected at Puerto Casado, Paraguay, in 1889, followed a few years later by others, to support which thousands of leagues of quebracho land in the Paraguay Chaco were bought.

Among the other forest products of value are the curupay tree furnishing a hard wood suitable for railroad ties and construction work, and



NANDUTI LACEWORK

Lace making is now recognized as one of the staple industries of Paraguay. The artistic patterns and delicate work have given the product a position of importance.

some tannin. The forests of the Republic have both subtropical timber and certain species that are characteristic of the temperate zone, but the best known resources of this country's flora is the quebracho tree, which is now one of the principal exports, and which is playing an important part in the world's industries.

COMMERCE.

The foreign commerce of Paraguay for the year 1915, according to the report of the Director-General of Statistics, Señor Don Gerardo C. Russo, amounted to 11,296,887 pesos gold, of which 2,405,888 pesos were imports and 8,890,999 pesos were exports.

The foreign trade for the two preceding years was: 1913, imports, 8,119,997 pesos; exports, 5,630,929 pesos; total, 13,750,926 pesos. 1914: imports, 5,149,465 pesos; exports, 4,584,358 pesos; total, 9,733,823 pesos.

Estimating the Paraguayan gold peso at 97 cents United States gold, the value of the foreign trade for the three years was: 1913, imports, \$7,876,397; exports, \$5,462,001; total, \$13,338,398. 1914, imports, \$4,994,981; exports, \$4,446,827; total, \$9,441,808. 1915, imports, \$2,333,711; exports, \$8,624,269; total, \$10,957,980.

IMPORTS.

The imports by countries for the years 1911, 1912, 1913, 1914, and 1915 were:

	1911	1912	1913	1914	1915
United Kingdom	\$1,914,803	\$1,301,454	\$2,254,313	\$1,138,021	\$771,037
Argentina	758,181	682,017	1,057,456	902,486	765,354
United States	386,107	306,467	473,679	416,082	210,232
Italy	344,809	308,201	479,953	345,626	169,685
Germany	1,803,105	1,508,737	2,176,607	1,350,063	161,669
Spain	406,562	322,868	417,128	271,936	113,718
France	408,131	366,778	520,985	251,410	56,755
Belgium	152,840	128,954	184,234	113,372	4,463
Austria-Hungary	106,037	125,095	85,113	66,927	1,013
Uruguay	42,421	35,539	58,360	39,984	30,140
Brazil	57,369	42,188	44,739	23,235	8,904
Switzerland	8,580	5,004	15,239	11,335	1,610
Netherlands	16,711	14,967	29,760	9,529	13,433
Other countries	88,490	41,813	78,831	51,975	25,098
Total	\$6,494,146	\$5,190,082	\$7,876,397	\$4,994,981	\$2,333,711



A SETTLERS' CAMP IN PARAGUAY.

All through the Argentine territory of Misiones, and along the new line of the Paraguay Central Railway, the impression is very vivid that the country is fast opening to the immigrant, and that they have come to make homes for themselves. The native Guaranis also are seen, and also European, either from the south or from north and east Europe. They are to become Americans in a few years. Already, as can be noted, they have acquired the habit of drinking Paraguayan tea.

The imports by major classifications for the years 1911, 1912, 1913, 1914, and 1915 were as follows:

	1911	1912	1913	1914	1915
Textiles	\$1,668,136	\$1,469,942	\$2,195,029	\$985,921	\$770,237
Foodstuffs	1,366,152	1,177,647	1,597,740	1,315,654	639,864
Hardware	518,192	914,770	1,508,461	1,127,391	311,035
Fancy goods ¹	396,491	382,488	557,957	298,835	97,714
Wines, spirits, etc	289,054	283,102	377,270	199,249	78,977
Drugs and chemicals	196,378	216,240	299,445	227,701	114,225
Ready-made clothing	135,313	96,313	176,275	105,616	92,996
Animals ²		73,725	130,394	63,501	38,876
Hats	82,571	72,869	124,021	41,066	14,584
Electrical supplies ³		58,837	82,206	83,344	10,829
Glass and chinaware	69,879	86,840	102,223	71,997	13,364
Firearms and ammunition	74,779	79,390	65,732	58,793	3,550
Hides and skins ²		42,744	61,455	31,002	13,333
Boots and shoes		40,956	67,552	38,164	7,616
Musical instruments ²		25,828	40,370	17,128	2,526
Furniture ²		20,691	28,550	24,628	2,408
Tobacco ²		10,115	15,656	14,431	6,289
Jewelry		11,507	17,249	4,712	1,015
Vehicles and accessories ³		5,959	43,659	34,209	13,622
Material for Public Works		120,119	385,153	251,648	100,651
Duty-free articles ³	1,334,054				
Miscellaneous	179,055				
Total	\$6,310,054	\$5,190,082	\$7,876,397	\$4,994,981	\$2,333,711

¹In 1911 included jewelry.

²In 1911 under "miscellaneous."

³Not classified in 1912, 1913, 1914 and 1915.

EXPORTS.

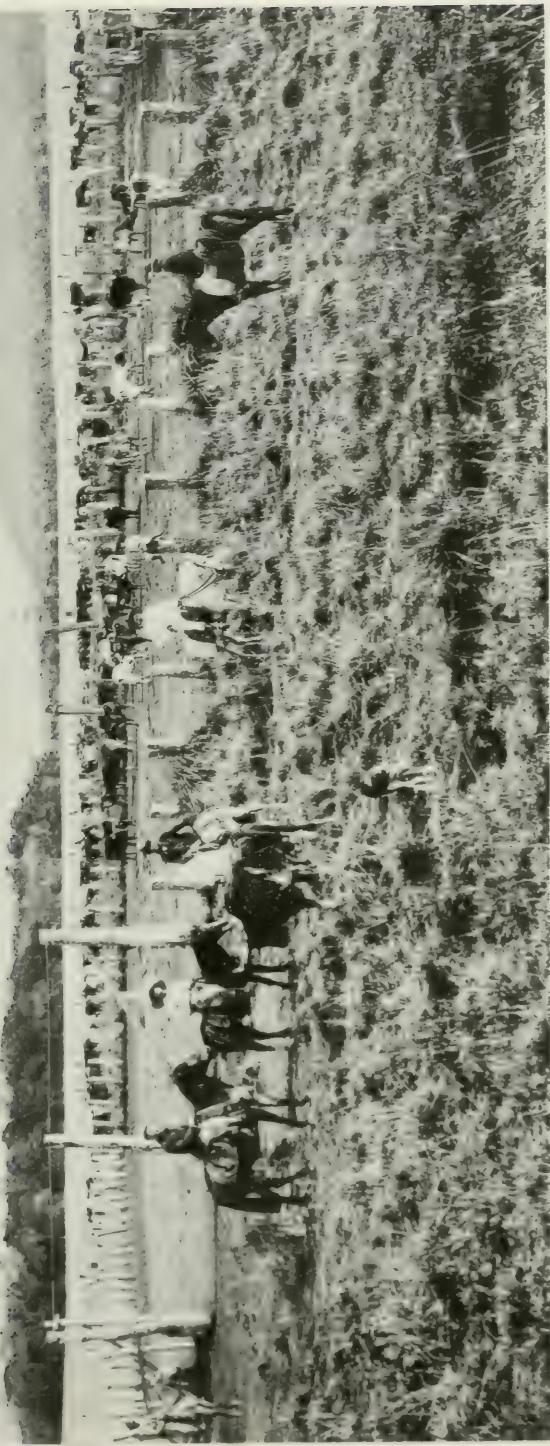
The exports by countries for the years 1911, 1912, 1913, 1914, and 1915 were as follows:

	1911	1912	1913	1914	1915
Argentina	\$2,550,221	\$2,372,599	\$3,410,925	\$2,634,750	\$3,528,186
Uruguay	706,794	676,767	673,784	572,929	556,812
Netherlands	5,667	2,018		107,393	536,048
United States	1,670	593		10,724	293,926
United Kingdom		1,018	158	112,082	191,352
France	72,388	33,199	33,069	49,405	68,615
Spain	153,113	98,539	25,195	78,621	63,527
Denmark					58,078
Norway					53,827
Belgium	21,714	10,662	56,130	34,479	
Italy	24,138	9,893	11,109	31,790	37,412
Brazil	45,424	55,071	37,740	26,184	27,432
Austria-Hungary	12,114	97	10,124		
Germany	959,943	847,829	1,198,686	786,169	4,272
Other countries	9,586	276	5,081	2,241	28,200
Total	\$4,593,506	\$4,108,651	\$5,462,001	\$4,446,827	\$5,447,687

In the table above and in the table following export values are stated on the basis of the Valuation Tariff of January 1, 1909, which has not been officially revised to conform to real values. In most cases the latter were far above the statistical values as set out in the 1909 Valuation Tariff schedules. The Paraguayan Statistical Office in advance of

BRANDING CATTLE IN THE PARAGUAY COUNTRY.

The value of the fields and meadows of Paraguay is rapidly becoming recognized by investors, and the number of head of cattle is worthy of note. At present it is estimated at over 7,000,000, with an annual increase of from 5 to 30 per cent. As climatic conditions are favorable all the year round, the future of the cattle industry, especially as transportation facilities improve, is most hopeful.



the reformation of the Valuation Tariff has announced the following additionals to be added to values above:

	PESOS
18,308 metric tons quebracho extract. Increase 100 pesos per ton	1,830,800
29,509 beef cattle. " 15 " each	442,635
286,277 cattle hides. " 1 " "	286,277
1,429,842 kilos meat products. " .10 " per kilo	142,984
Other products. " 20 per cent	572,131
Statistical value according to Valuation Tariff	<u>5,616,172</u>
Total	8,890,999
Value in United States gold	\$8,624,269

The total of exports to Argentina and to Uruguay, as given above, represents a very considerable element of transit trade. Nearly all the hides, quebracho, and some woods, shown in the following table, accredited primarily as exports to the two countries mentioned, are in reality exports to Europe and to the United States.

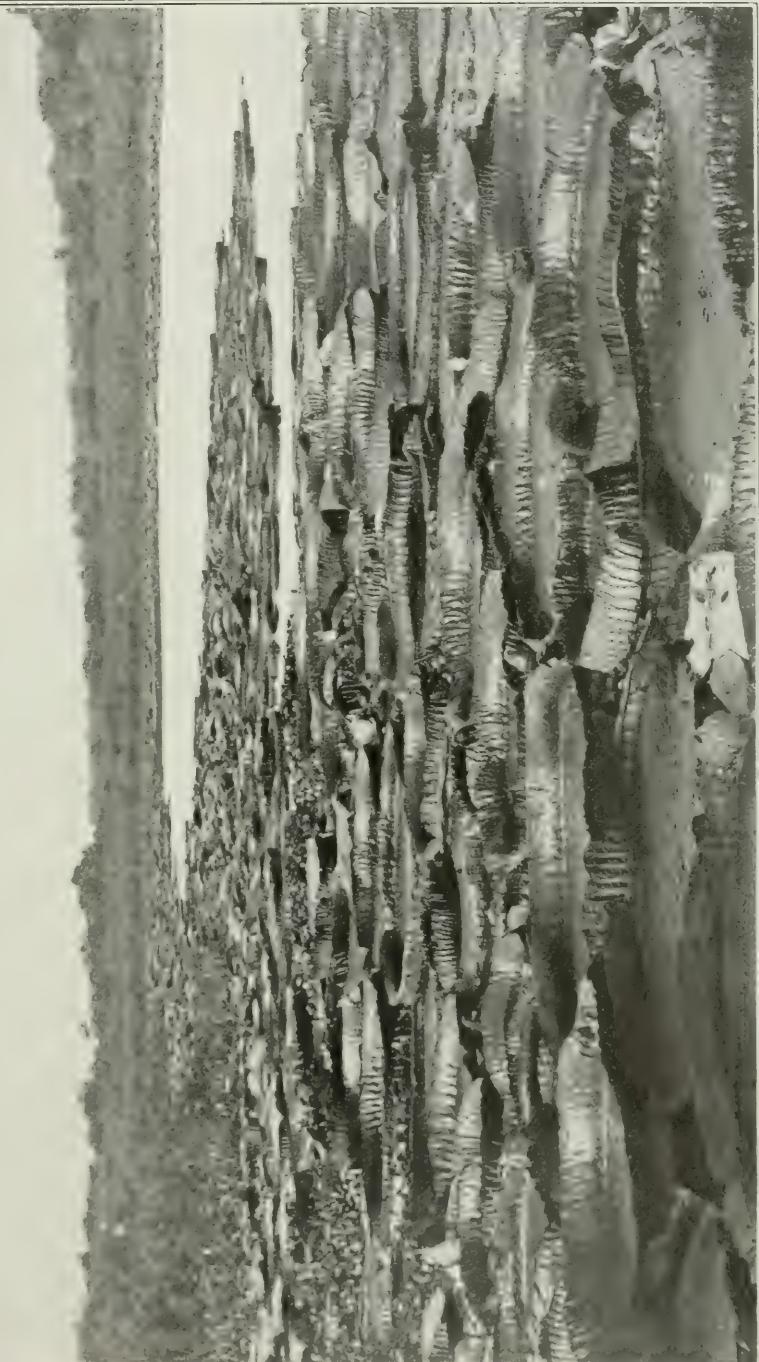
The exports by principal articles for the years 1911, 1912, 1913, 1914, and 1915 (incomplete) were as follows:

	1911	1912	1913	1914	1915
Quebracho extract.....	\$472,675	\$424,745	\$682,160	\$738,732	\$939,564
Hides.....	982,111	1,080,985	1,160,198	1,003,191	925,418
Verba maté.....	436,578	500,120	747,870	590,130	783,720
Tobacco.....	694,577	431,623	573,974	484,987	728,084
Woods.....	1,159,677	835,397	956,827	565,030	406,957
Oranges.....	119,903	185,642	249,981	219,846	276,025
Beef cattle.....	1,329	45,212	354,927	237,396	233,033
Oil of petitgrain.....	55,004	66,657	95,775	76,123	101,929
Tallow.....	50,880	44,220	26,426	21,461	34,655
Horsehair.....	37,705	46,156	37,751	27,789	31,367
Horns.....	49,404	63,378	57,236	36,968	8,862
Bran.....	6,002	8,234	5,775	106,186	.....
Meat extract.....	9,362	3,409	27,891	32,972	.....
Beef meal.....	.....	.....	18,103	82,644	275,071
Jerked beef.....	284,386	293,635	249,441	108,347	.....
Sugar.....	.....	.....	52,926	.....	.....
Heron plumes (aigrettes)	43,054	12,009	8,546	6,970	.....

RAILWAYS AND INTERIOR WATERWAYS.

The only railway in operation in Paraguay is the Paraguay Central Railway Co., which, until the completion of the extension to the Argentine border, ran from the capital, Asuncion, to Pirapo, a distance of 155 miles (250 kilometers). During 1910 the gauge of the older section of the line was changed to conform to that of the Argentine railways. By July 1, 1911, the entire line had been opened to traffic as far as Villa Encarnacion on the Alto Parana River, thus giving to the Republic an increased mileage of 77 miles (124 kilometers) and making a total of 232 miles (373 kilometers) of railroad in operation.

The change of gauge and extension of this railroad is by far the most important development which has taken place in Paraguay for many years. Before these improvements were completed the journey from Buenos Aires to Asuncion by the river route alone occupied five days, and by rail and river about fifty-five hours. This time is shortened by the



THE "VICTORIA REGIA" ON THE PARAGUAY RIVER NEAR ASTUNCION.

This aquatic plant was discovered in 1860 in South America. It received the name from Queen Victoria when it was introduced into England. The leaves are six feet in diameter.

route by rail from Buenos Aires to Posadas, opposite Villa Encarnacion, where a transfer is made to the ferry and the train taken at the latter point for the Paraguayan capital. A train ferry has been established between Posadas and Encarnacion, so that the journey between the two capitals can be made without change of cars, in two days.

In addition to the change of gauge of the Paraguay Central, the road has been equipped with entirely new locomotives, passenger and freight cars of the most modern description, so that the traveler may feel assured that his visit to the principal city of the Republic will be made as comfortable as possible.

This railroad proposes at no distant period to build 75 miles (120 kilometers) of new branches, one of which will run to Carapeguá and another to Villette, both situated in important agricultural sections of the country.

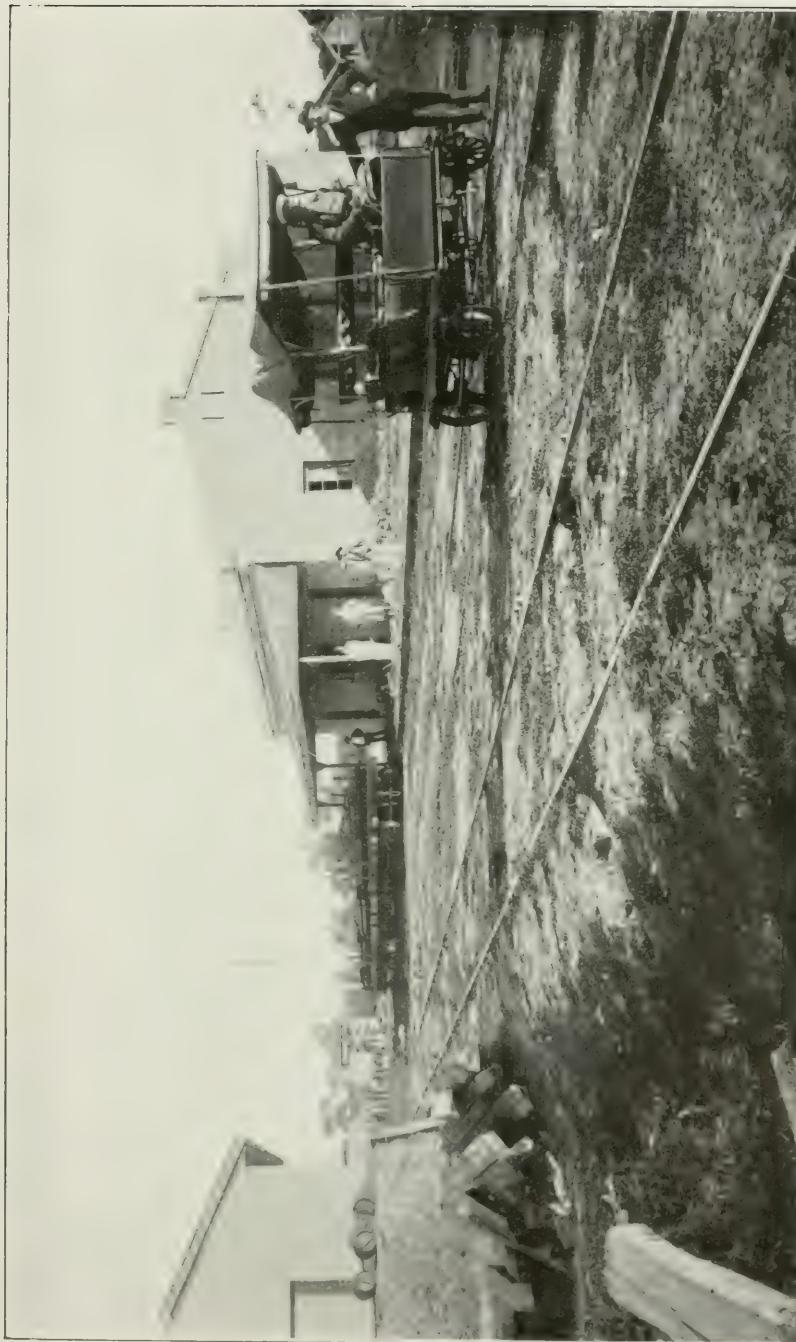
Surveys have been made for the construction of a Trans-Paraguayan Railway, which, starting at São Francisco, on the Atlantic coast of Brazil, will traverse that Republic to the Falls of Iguazu, which rival Niagara in grandeur; then, crossing the Paraná River, proceed northwest to Asuncion. Work on this line has been checked but its construction is only a matter of time. By the completion of the Paraguayan section to Asuncion and an extension of this route up through the Gran Chaco, thence on through Bolivia and Chile to the Pacific coast, the commerce of many navigable rivers and of vast unexploited territories in the four republics will be brought into closer touch with the outside world. Great tracts of quebracho and other timberlands will also be benefited and extensive zones of rich agricultural and grazing lands thrown open to settlement and cultivation.

Paraguay is otherwise dependent on its waterways for means of communication and transportation, which, however, afford an efficient and convenient outlet for its products.

It lies between the rivers Paraguay and Paraná, which join their waters at or near Curupaití, at the extreme southern end of the Republic, and together with the Uruguay River form the mighty estuary of the Río de la Plata, one of the largest bodies of water in the world.

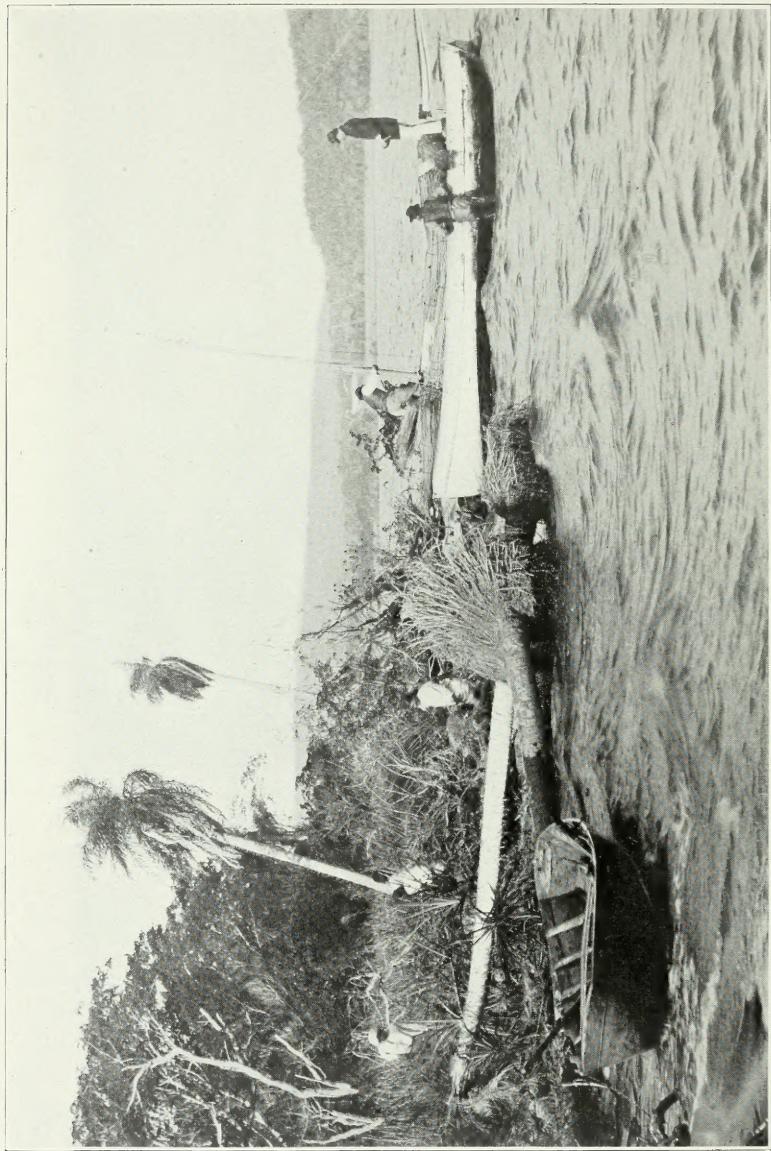
The Paraná River has a total length of 2,043 miles (3,288 kilometers) from its source in the Goyaz Mountain, Brazil, to its junction with the Paraguay, and is navigable for vessels of 12-feet draft as far as the city of Corrientes, a distance of 676 miles (1,090 kilometers) and from that city to the Guayra Falls, a distance of 600 miles (965 kilometers), for small vessels, but beyond that point navigation is impeded by the falls.

The Paraguay River is the most important waterway of the Republic, being navigable for vessels of 12-feet drafts as far as the cities of Asuncion



A STATION IN PARAGUAY.

The distance by the rail route (new) between Buenos Aires and Asuncion, Paraguay, is 943 miles (1,518 kilometers) and the northern part runs through a comparatively undeveloped country that is rapidly being opened by this railway connection. In Paraguay itself the route passes over the Paraguay Central. Small stations like this—at Vity are quite frequent, and they, with their surroundings, show the traveler how development is taking place.



LAKE IPACARAY, NEW ASUNCION, PARAGUAY.
In the *Guarani* tongue Ipacarai means "Conjured." This beautiful lake can be reached by rail from the capital. It has become a popular resort for all classes of people.

and Villa Concepcion and beyond that for smaller vessels almost its entire length of 1,800 miles (2,896 kilometers).

A number of the affluents of the Paraguay River, such as the Pilcomayo, the Jejuy, and the Tibicuary River, are navigable for short distances.

Among the lakes the most important are the Ipoa and Ipacaray, the former covering an area of over 100 square miles (259 square kilometers), both of these being navigable for small craft.

The principal shipping points of the Republic on the Paraguay River are Asuncion, the capital, situated near the confluence of that river with the Pilcomayo; Villa Conception, and Humaita. The city of most importance on the Parana River is Villa Encarnacion.

Regular *steamer service* is maintained on the Paraguay River as far as Asuncion, by several steamship companies, and many of them proceed further up, to Villa Concepcion and into Brazil. The distance of about 1,000 miles (1,609 kilometers) is covered in four to five days, according to the season, and traveling conditions are very comfortable. Occasionally an ocean steamer will ascend the river, but only for cargoes, no passenger service being offered. The railway (mentioned under railways) now provides regular trains between Buenos Aires and Asuncion without change, in three days. For travel in the interior apart from the railway or the rivers, the country roads must be used, by stage coach in some cases, or by saddle in others. Paraguay has many beautiful lakes which have become the resort for holiday makers and health seekers. One of them is San Bernardino on Lake Ipacaray, two hours by rail from Asuncion. Attractive hotels make the visit agreeable and comfortable, while the residences of the people of Asuncion, built around the banks, add to the charm of the place.

EDUCATION.

Education in Paraguay is free and compulsory. There are upwards of 800 public schools, with an attendance of somewhat more than 50,000. The Government is making strong efforts to extend the school system into the less accessible parts of the Republic, so as to reach all classes of the people. Some private schools are subsidized by the national council of education, as a means toward increasing the educational facilities. At Asuncion there is a national college with a complete teaching staff and over 500 students in attendance. The State maintains about 50 scholars in Europe and the United States for the purpose of giving them a higher technical education of value to them when they return to their native country. Besides contribution from general taxes, there is a special government fund for education, derived from the sale of lands, customs dues, and similar sources.

THE PAN AMERICAN UNION is the international organization and office maintained in Washington, D. C., by the twenty-one American republics, as follows: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador, United States, Uruguay, and Venezuela. It is devoted to the development and advancement of commerce, friendly intercourse, and good understanding among these countries. It is supported by quotas contributed by each country, based upon the population. Its affairs are administered by a Director General and Assistant Director, elected by and responsible to a Governing Board, which is composed of the Secretary of State of the United States and the diplomatic representatives in Washington of the other American governments. These two executive officers are assisted by a staff of international experts, statisticians, commercial specialists, editors, translators, compilers, librarians, clerks and stenographers. The Union publishes a *Monthly Bulletin* in English, Spanish, Portuguese and French, which is a careful record of Pan American progress. It also publishes numerous special reports and pamphlets on various subjects of practical information. Its library, the Columbus Memorial Library, contains 33,000 volumes, 16,000 photographs, 121,000 index cards, and a large collection of maps. The Union is housed in a beautiful building erected through the munificence of Andrew Carnegie.

